

Product datasheet for **RC228997**

RASGRP3 (NM_015376) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	RASGRP3 (NM_015376) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	RASGRP3
Synonyms:	GRP3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC228997 representing NM_015376
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGGATCAAGTGGCCTTGGGAAAGCAGCAACATTAGATGAACTGCTGTGCATTGCATTGAGATGTTT
 ATGACAATGGAGAGCTGGATAATAGTTATTTGCCAAGAATAGTTCTACTGATGCACCGATGGTATTTATC
 TTCCACTGAATTGGCAGAAAACTTCTCTGCATGTATCGAAATGCCACTGGAGAAAAGCTGCAATGAATTT
 CGATTAAGATCTGCTACTTTCATGAGGACTGGATTCTGAAGTTTCTGCAGAGTTAATTTGGATCTTG
 GTTTGATTCGATGACTGAGGAATTTGGGAAAGTACTAGTCAACTAGGATATGAAAAACACGTCAGCCT
 CATCGACATATCCAGCATTCTTCTATGACTGGATGAGAAGAGTCACACAGAGGAAAAAGTATCCAAG
 AAGGGAAAAGCCTGTCTGCTGTTTGACCATCTGGAGCCCATTGAATTGGCTGAGCACCTCACTTTTCTGG
 AGCATAAATCTTTAGAAGGATCTCATTACTGATTACCAAAGCTATGTCATCCATGGCTGCCTGGAGAA
 TAATCCAACCTTGGAAAGATCGATTGCTTTATTTAATGGAATCTCTAAGTGGGTCCAGTTGATGGTTCTT
 AGCAAACCAACCCCGCAGAAAGGGCAGAAGTCATCACAAAGTTTATCAATGTTGCAAAGAAGCTCCTTC
 AGCTCAAAAAATTTAACACCCTGATGGCAGTGGTGGGAGGCCCTCAGTCATAGTTCATTTACGCCTCAA
 AGAGACCCATTCTCATCTTTCTCAGAAGTTACAAAGAACTGGAATGAAATGACAGAGTTGGTCTCCTCC
 AACGGCAATTACTGCAATTACCGCAAGGCCCTTGGCCGACTGCGATGGCTTCAAAAATCCCCATCCTTGGAG
 TACACTTGAAAGACTTGATAGCTGTCCATGTCAATTTCCAGACTGGACAGAGGAGAACAAAGTGAACAT
 TGTGAAAATGCACCAGCTCTCCGTTACCCTGAGTGAACAGTCTCCCTGCAGAAATGCCTCTCACCCTTA
 GAACCAACATGGATTTGATCAACCTGCTCAGCCTTCCCTGGACCTCTATCACACTGAAGATGATATTT
 ACAAACTGTCACTGGTGGTGGAGCCTAGAAATTTAAATCGCCTACCTCCCCTACGACGCCCAACAAGCC
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 GGATTTATCCATAATTTTCCAGGAGATGACCTATCTCAAGCCAACCTTCTGCGAACACTGTGCGGGATTTCT
 TCTGGGCATAATCAAGCAAGGATACAAATGCAAAGACTGTGGAGCCAATTGTCACAAACAGTGCAAAGA
 CCTCCTGGTTCTGGCCTGCAGGAGATTTGCCCGGGCCCTCCTTGAGCAGTGGTCATGGGTCACTGCCT
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 ACCTTCCCTAAAATGAAATCCAAGTTCATGACAAAGCAGCAAAGGACAAAGGCTTTGCCAAATGGGAAA
 ATGAGAAGCCAGGGTGCATGCTGGTGTGGATGTTGTAGACCGGGGCACGGAGTTTGAACCTTGACCAGGA
 TGAAGGAGAAGAGACCAGACAGGATGGTGGATGGC

ACGCGTACGCGGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC228997 representing NM_015376

Red=Cloning site Green=Tags(s)

MGSSSLGKAATLDELCTCIEMFDDNGELDNSYLPRIVLLMHRWYLSSTELAEKLLCMYRNATGESCNEF
 RLKICYFMYWILKFPAEFNLDGLIRMTEEFREVASQLGYEKHVSLIDISSIPSYDWMRRVTQRKKVSK
 KGKACLLFDHLEPIELAEHLTFLEHKSFRRIISFTDYQSYVIHGLENPTLERSIALFNIGISKWVQLMVL
 SKPTPQQRRAEVI TKF INVAKLLQLKNFNTLMVVGGLSHSSISRLKETHSHLSSEVTKNWNEMTELVSS
 NGNYCNYRKAFAADCDFKIPILGVHLKDLIAVHVIFPDWTEENKVNIVKMHQLSVTLSELVSLQNASHHL
 EPNMDL INLLTSLDLYHTEDDIYKLSLVLEPRNSKSPTPTTPNKPVVPLEWALGVMPKPDPTVINKHI
 RKLVESVFRNYDHDHDGYISQEDFESIAANFPFLDSFCVLDKDKDGLISKDEMMAYFLRAKSQLHCKMGP
 GF IHNFQEMTYLKPTFCEHCAGFLWGIKQGYCKDCGANCHKQCKDLLVLACRRFARAPSLSSGHGSLP
 GSPSLPPAQDEVFEFPGVTAGHRDLDSRAITLVGTSSRKISVRLQRATTSQATQTEPVWSEAGWGDGSGH
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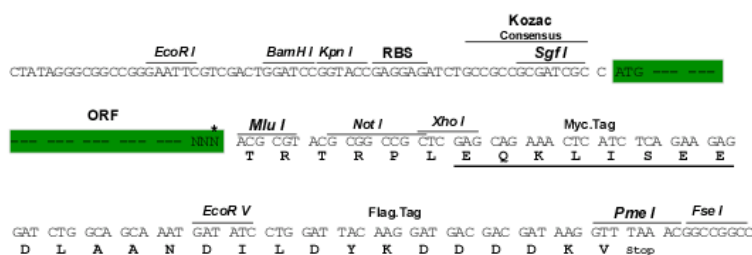
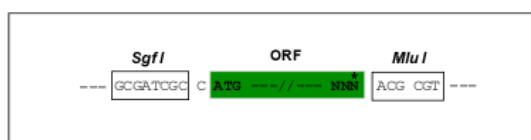
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_015376

ORF Size: 2067 bp

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:

1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

RefSeq: [NM_015376.2](#), [NP_056191.1](#)

RefSeq Size: 4353 bp

RefSeq ORF: 2070 bp

Locus ID: 25780

UniProt ID: [Q8IV61](#)

Cytogenetics: 2p22.3

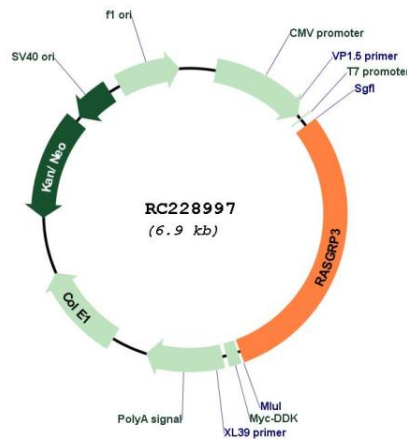
Domains: RasGEFN, RasGEF, EFh, DAG_PE-bind

Protein Pathways: B cell receptor signaling pathway, MAPK signaling pathway

MW: 78.2 kDa

Gene Summary: The protein encoded by this gene is a guanine nucleotide exchange factor that activates the oncogenes HRAS and RAP1A. Defects in this gene have been associated with systemic lupus erythematosus and several cancers. [provided by RefSeq, Mar 2017]

Product images:



Circular map for RC228997